

**964. Selected Topics in International Relations**

*Winter. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department.*  
Intensive analysis of special problems and issues such as international political and economic development, international and intercultural communications, international violence, etc.

**972. Modern Political Thought**

*Spring of even-numbered years. 3(3-0)*  
Systematic analysis of selected works of such writers as Machiavelli, Hobbes, Locke, Montesquieu, Hume, Rousseau, Burke, Mill, Marx or other political philosophers. Special attention is given to those writers or works relevant to understanding the philosophical foundations of contemporary social science and ideology.

**973. American Political Thought**

*Fall of odd-numbered years. 3(3-0)*  
Study of the thinkers and social forces which have shaped American political ideology.

**981. Selected Topics in General Political Theory**

*Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits. PLS 880 or approval of department.*

Analysis in depth of such topics as individual political choice, collective choice and decision making, political coalitions, political leadership, political communication and diffusion processes, political integration and differentiation, equality and inequality, and interaction models of conflict.

**990. Seminar**

*Fall, Winter, Spring. 4 to 12 credits. May reenroll for a maximum of 36 credits.*

Intensive training in individual or group research. Sections of the seminar may involve one or more doctoral fields and the credit earned will vary accordingly.

**993. Readings in Political Science**

*Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 10 credits.*

**999. Doctoral Dissertation Research**

*Fall, Winter, Spring, Summer. Variable credit. Approval of department.*

**PORTUGUESE**

See Romance and Classical Languages.

**POULTRY SCIENCE**

See Animal Science.

**PSYCHIATRY**

**College of Human Medicine  
College of Osteopathic Medicine**

**520. Introduction to Behavioral Medicine**

*Winter. 2(2-0) Admission to a college of medicine or approval of instructor.*

Discrimination between various concepts of normality, understanding of psychological mechanisms, making observations and inference generation, recognition of normative crises and the psychiatric examination will be taught through lectures and discussions.

**521. Psychopathology**

*Spring, Summer. 3(3-0) PSC 520 or concurrently.*

Recognition, description, and treatment of most psychopathologic states will be taught using lectures, audio-visual presentations, and group discussions.

**533. Fundamentals of Personality Dysfunction**

*Winter. 3(3-0) Admission to a college of medicine and approval of department; H M 514 concurrently.*

Major psychiatric disorders. Mental disorders and patient behaviors that will be of value in working with nonpsychiatric and psychiatric patients.

**590. Special Problems in Psychiatry**

*Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Medical students; graduate students with approval of department.*

Each student will work under direction of a staff member on an experimental, theoretical or applied problem.

**608. Psychiatry and Behavioral Science Clerkship**

*Fall, Winter, Spring, Summer. 2 to 12 credits. Admission to a college of medicine; grade P in all courses in terms 1 through 8 for College of Osteopathic Medicine students.*

Contemporary practice of psychiatry utilizing supervised in-patient, out-patient, emergency and community mental health services.

**609. Sub-Specialty Clerkship**

*Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. PSC 608.*

Sub-specialty experiences in Psychiatry in clinical settings.

**PSC**

**160. Introductory Psychology: Social-Personality**

*Fall, Winter, Spring, Summer. 3(3-0)*  
The complex functioning of the individual in different social environments will be considered. Topics include: socialization, interpersonal perception, group processes, motives, emotions, attitudes, and values. Students may participate in psychological experiments outside of class.

**170. Introductory Psychology: General**

*Fall, Winter, Spring, Summer. 4(4-0)*  
Principles underlying the behavior of humans and animals. Topics include: cognition, emotion, motivation, learning, sensation, and perception. Students may participate in psychological experiments outside of class.

**215. Introduction to Psychological Measurement**

*Fall, Winter, Spring, Summer. 4(3-2) PSY 160 or PSY 170.*

Psychology as a quantitative discipline; graphical presentation and interpretation; psychological data in various content fields; methods of summarizing behavioral data; samples, populations and probability in psychological research; hypothesis testing.

**225. Psychology of Personality**

*Fall, Winter, Spring, Summer. 3(3-0) PSY 160 or TE 200 or Sophomores with approval of department.*

Application of psychological principles to an introductory understanding of personality and interpersonal adjustments; social motivation, frustration, conflicts, and adjustment mechanisms; theories of adjustment, the assessment of personality, problems of mental hygiene and some theories of psychotherapy.

**244. Developmental Psychology: Infancy through Childhood**

*Fall, Winter, Spring, Summer. 4(4-0) PSY 160 or PSY 170 or TE 200.*

Developmental psychology of the infant and child including biological, social, cognitive, moral, perceptual and cultural development; relations with care givers and peers as well as development of individual characteristics.

**246. Sensitivity to Children I**

*Fall. 3(2-2) To receive credit PSY 246, PSY 247, PSY 248 must be completed satisfactorily except by prior arrangement with instructor. Sophomores and 3 credits in psychology.*

Three-term sequence emphasizes supervised weekly play with a child and analysis of videotaped recordings. Readings and discussions cover problems faced by child therapist, teachers and parents.

**247. Sensitivity to Children II**

*Winter. 3(2-2) To receive credit PSY 246, PSY 247, PSY 248 must be completed satisfactorily except by prior arrangement with instructor. PSY 246.*  
Continuation of PSY 246.

**248. Sensitivity to Children III**

*Spring. 3(2-2) To receive credit PSY 246, PSY 247, PSY 248 must be completed satisfactorily. PSY 247.*  
Continuation of PSY 247.

**255. Organizational and Personnel Psychology**

*Fall, Winter, Spring, Summer. 3(3-0)*  
*Introductory course in psychology.*  
The psychology of managing and leading, personnel operations, and the humanizing of work organizations.

**PSYCHOLOGY**

**College of Human Medicine  
College of Social Science**

**139. Psychology of Women**

*Winter, Spring. 3(3-0) Primarily for Freshmen and Sophomores.*

Psychological development of sex-typed behavior and sex differences in cognitive and personality functioning; reproductive behavior; impact of social expectations on self-concept, achievement and affiliation orientations, and life decisions.

**PSY**

## Descriptions – Psychology

### of Courses

#### 291. **Independent Study: Research Participation**

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. PSY 160 or PSY 170, PSY 215.

Student participates as an assistant in an ongoing psychological research project under the direction of a staff member in order to become familiar with the procedures of psychological research.

#### 300. **Cognitive Psychology**

Winter. 4(4-0) PSY 170, PSY 215, 10 credits of psychology or approval of department.

Concepts, theories, methods and research findings in human information processing and cognition; including attention, memory, intelligence, problem solving, decision making, language, and reading.

#### 301. **Human Learning and Memory**

Winter, Spring, Summer. 4(4-0) PSY 170; PSY 215 or a college level mathematics or statistics course.

Concepts, procedures, issues, and principles involved in the acquisition, retention, transfer and execution of verbal learning, identification learning, and perceptual-motor skills.

#### 309N. **Fundamentals of Physiological Psychology**

(309.) Fall, Spring. 3(3-0) CEM 141, PSL 240. For students in the natural and life sciences. Students may not receive credit in both PSY 309N and PSY 309S.

Central nervous system functional anatomy and physiological bases of behaviors, including neural and hormonal control of biorhythms, reproduction, hunger and thirst.

#### 309S. **Survey of Physiological Psychology**

(209.) Fall, Spring. 3(3-0) PSY 170. For students in the social sciences and liberal arts. Student may not receive credit in both PSY 309N and PSY 309S.

Current topics in behavioral biology, including: the physiology of learning and memory; hormones and behavior; and human neuropsychology.

#### 312. **Learning and Motivation**

Fall, Winter, Spring, Summer of odd-numbered years. 3(3-0) PSY 170, PSY 215; PSY 313 concurrently.

Detailed analysis of basic conditioning processes such as reinforcement, discrimination, generalization, punishment, adverse behavior, and theories of learning. Emphasis on infrahuman data, but applications to human behavioral modification are considered.

#### 313. **Experimental Psychology: Learning and Motivation**

Fall, Winter, Spring, Summer of odd-numbered years. 3(1-4) PSY 170, PSY 215; PSY 312 concurrently.

Representative experiments in operant behavior, including an individual project selected by the student, using the pigeon as the laboratory animal.

#### 316. **Sensory Processes**

Winter. 3(3-0) PSY 170; PSY 215 or a college-level mathematics or statistics course.

Sense organs and their associated neural systems as they relate to sensory phenomena; emphasis on vision. Review of major methodologies.

#### 317. **Perception**

Fall. 3(3-0) PSY 170.

Concepts, principles, results, and applications in perception; emphasis on vision.

#### 335. **Principles of Social Psychology**

Fall, Winter, Spring, Summer. 4(4-0)

PSY 160. Students may not earn credit in both PSY 335 and SOC 251.

A critical survey of social psychology with emphasis on psychological principles underlying social behavior. Topics include social perception; motivation; attitudes and attitude change; social interaction in small groups and in large-scale organizations.

#### 336. **Psychology of Social Movements**

Fall, Spring. 3(3-0)

Psychology of political, religious, and other social movements: group identifications and affiliation, socialization, conversion, and defection; the perception of social movements by members; influences of motivation and personality on ideologies and social movements.

#### 337. **Legal and Criminal Psychology**

Fall, Winter, Spring. 3(3-0) PSY 160 or TE 200.

Application of psychological principles, methods and techniques to legal and criminal problems and procedures, including the formation, detection, prevention, and rehabilitation of criminal behavior, testimony, legal arguments, trial tactics and the other courtroom procedures.

#### 344. **Developmental Psychology: Adolescence and Youth**

Winter, Spring, Summer. 3(3-0) PSY 244.

Continuation of PSY 244 covering development during adolescence and youth with emphasis on problems of identity and adjustment to the social environment.

#### 356. **Organizational Psychology**

Fall, Spring. 3(3-0) An introductory course in psychology; PSY 255 or MGT 310. Students may not earn credit in both PSY 356 and MGT 419.

Leader behavior, attitudes, interpersonal behavior, motivation and communication of individuals in organizations.

#### 357. **Consumer Psychology**

Fall, Winter, Spring. 3(3-0) PSY 170; PSY 335 or SOC 251; or approval of department.

Psychology underlying techniques of effective advertising, selling, and marketing. Psychology relevant to living in a marketing-oriented culture.

#### 370. **Psychology and Social Innovation**

Winter. 3(3-0) A social science research methods course or approval of department.

Planning, implementing and evaluating experimental approaches to social problems. Topics include: adoption of innovations; field research problems; science and policy formation; parameters of program evaluations.

#### 371. **Community Projects I**

Fall, Spring. 4(2-4) PSY 160 or PSY 170, approval of department.

Experience in working directly with adolescent offenders from the local community. Techniques of intervention with adolescents, their families, and social systems which affect them.

#### 372. **Community Projects II**

Winter, Summer. 4(2-4) PSY 371, approval of department.

Continuation of PSY 371 with primary focus on direct work with adolescents, their families and social systems which affect them.

#### 373. **Community Projects III**

Fall, Spring. 4(2-4) PSY 372, approval of department.

Continuation of PSY 372.

#### 390H. **Honors Seminar**

Fall, Winter, Spring. 1 to 5 credits. May reenroll for a maximum of 15 credits when different topics are offered. Honors students and approval of department.

History, theory, and current research in selected areas of psychology, including personality, motivation, perception, learning, industrial, ecological, mathematical, developmental, social, and clinical.

#### 400. **Selected Topics in Psychology**

Fall, Winter, Spring, Summer. 2(2-0) to 5(5-0) May reenroll for a maximum of 12 credits. Approval of department.

Selected topics in the areas of experimental, developmental, social, industrial, personality, mathematical, ecological, or clinical psychology.

#### 403. **Experimental Psychology: Human Learning**

Winter. 4(4-0) PSY 215 or approval of department.

Application of principles of learning and motivation to humans of various ages and abilities in educational and noneducational settings. Some application to animal behavior. Extended practicum (PSY 490-PSY 491) may be taken concurrently to complete appropriate projects.

#### 405. **Modern Viewpoints in Psychology**

Fall, Spring. 3(3-0) 15 credits in psychology.

Survey of psychological systems in the modern era including behaviorism, Gestalt psychology, psychoanalysis, neo-behaviorism in relation to other selected disciplines.

#### 406. **Psycho-ethology**

Spring. 4(4-0) Six credits of psychology or ZOL 413.

Comparative and ethological methods and their application to behavior with emphasis on animals other than humans. Review of research on innate behavior, early experience, learning, motivation, and physiological processes.

#### 409. **Advanced Concepts in Physiological Psychology**

Fall, Spring. 4(4-0) PSY 309N or approval of department.

Detailed analysis of advanced concepts in physiological psychology, such as vision, audition, somatic sensation, chemical senses, motivation, emotion, perception, arousal, learning, and the influence of hormones on behavior.

#### 414. **Psycholinguistics**

Winter. 4(4-0) PSY 301 or LIN 401.

Experimental psychology of language, including speech perception, sentence processing, prose comprehension and memory, and language production.

- 415. Psychological Tests and Measurements**  
Fall, Winter, Spring. 5(5-0) PSY 215.  
Methods, techniques, and instruments for measuring individual differences in behavior. Standard methods of construction, critical analysis of representative tests, criteria for evaluating and selecting tests, values and limitations of tests.
- 424. Child Psychopathology**  
Winter, Spring. 3(3-0) PSY 244 or approval of department.  
Description, etiology, and developmental pattern of behavior problems of children and adolescents; introduction to child and family treatment approaches.
- 425. Abnormal Psychology**  
Fall, Winter, Spring, Summer. 4(4-0) PSY 225.  
Nature of abnormal behavior and its social significance: description of symptoms and dynamics of psychological disorders; the neuroses and psychosomatic reactions, sociopathic behavior and character disorders, functional and somatogenic psychoses; some consideration of therapies and theories of prevention.
- 427. Personality: Dynamic Theories**  
Fall, Winter, Spring. 3(3-0) PSY 425.  
Survey of personality theories of development, structure, and dynamics related to learning, determinants, cultural influences, behavioral disorders and assessment methods.
- 428. Psychology of Physical Disability**  
Spring. 3(3-0) PSY 425.  
Psychological problems, principles and practices in physical disabilities and handicaps; psychological assessment and diagnosis; counseling and placement; re-education and retraining; attitudes, motivations, and emotion; psychological rehabilitation and adjustment.
- 430. Experimental Psychology: Personality**  
Spring. 3(3-0) PSY 215.  
Critical survey of experimental investigations of personality dynamics and the effects of individual differences on social interaction; consideration of stress and anxiety, response set, cognitive styles, risk taking and subjective probabilities, and aggression. Emphasizes experimental techniques most relevant for those with clinical and social psychological interests.
- 431. Experimental Psychology: Personality**  
Spring. 2(0-4) PSY 215, PSY 430 or concurrently.  
A laboratory course coordinated with PSY 430, with laboratory demonstration and experiments, conducted by the students, designed to clarify issues in the experimental study of personality, and to provide experience with a variety of investigatory techniques.
- 436. Psychology of Communication and Persuasion**  
Fall, Spring. 3(3-0) PSY 335 or SOC 251.  
Psychological processes underlying communication and persuasion; learning and using communication in interpersonal relations; effects of communication themes, techniques, symbols, and formats on thought, attitude, and personality of audiences.
- 437. Psychology of Political Behavior**  
Fall, Winter, Spring. 3(3-0) PSY 335 or SOC 251 or 6 credits in sociology or political science. Interdepartmental with the Department of Political Science.  
Psychological theories, principles, methods and techniques applied to political behavior; belief systems; personality influences; decision making, psychological patterns in legislative voting; political leadership; interpersonal and international relations and tensions.
- 438. Research Methods in Social Psychology**  
Fall, Winter, Spring. 4(2-4) PSY 215; PSY 335 or SOC 251; 1 course in experimental psychology.  
Critical examination of problems, principles, methods, techniques, materials, results and conclusions in relation to theory in social psychology, including experimentation and demonstration.
- 439. Selected Topics in the Psychology of Women**  
Fall, Spring. 3(3-0) May reenroll for a maximum of 9 credits when different topics are offered. Nine credits in psychology or approval of department.  
Selected topics: e.g., achievement and affiliation behavior; sex-typed behavior and identity; political socialization of women; personality perspectives; psychohistory of women; professional and traditional orientations; third world women.
- 444. Advanced Developmental Psychology**  
**A. Social Development**  
Fall. 4(4-0) PSY 160, PSY 170, PSY 215, PSY 244 or approval of department.  
Theories and recent research in social development of infants, children, and adolescents.  
**B. Cognitive Development**  
Winter. 4(4-0) PSY 160, PSY 170, PSY 244 or approval of department.  
Recent approaches to cognitive development. A view of selected theories and experiments.  
**C. Language Development**  
Spring. 4(4-0) PSY 160, PSY 170, PSY 244 or approval of department.  
Psychological theories and experiments in the development of language in the child, including both social and cognitive effects of language development.  
**D. Applied Development**  
Fall, Summer. 4(4-0) PSY 160, PSY 170, PSY 244 or approval of department.  
Selected behavior problems in development. Topics may include; child psychopathology, physical and emotional disabilities, speech disorders, cognitive-intellectual deficits.
- 455. Personnel Research Techniques**  
Fall, Spring. 4(3-2) PSY 215, PSY 255.  
Quantitative psychological research technique applied to typical personnel problems in industry and government.
- 456. Personnel Training and Development**  
Spring. 4(4-0) PSY 356 or MGT 419.  
Each student develops skills called for in training work-level employees, supervisors and managers in industry, business, and government—all in an organization development frame of reference. Relevant research reviewed.
- 470. Research Methods in Ecological Psychology**  
Spring. 4(3-2) PSY 160, PSY 170, PSY 215; PSY 370 or approval of department.  
Methods, techniques, and measurement instruments for applying psychology to the solution of contemporary human problems. Critical analysis of methods for creating and measuring social change.
- 484. Literature and Psychology**  
Spring. 4(4-0) Juniors or approval of department. Interdepartmental with and administered by the Department of English.  
An application of psychological theory to the study of literature and an exploration of the ways in which literature enriches the theory which helps to illuminate it.
- 485. Psychology of Love and Maturity**  
Fall, Winter. 4(4-0) Juniors and 3 courses in psychology.  
The function of love in human existence. Varieties of love; their effect upon the growth of the person in terms of awareness, integration, authenticity, social concern and responsibility, maturity and fulfillment.
- 486. Psychology of Music**  
Fall, Summer. 3(3-0) Approval of department. Interdepartmental with the Department of Music.  
Musical behavior with emphasis on psychological aspects of perception, learning, affective response, and ability. Emphasis on social and cultural influences in forming musical tastes, including mass media music.
- 487. Psychology of Music**  
Winter, Summer. 3(2-2) PSY 486. Interdepartmental with the Department of Music.  
Basic research concepts and experimental methods in psychology of music research. Practical training in conducting experimental research of musical behavior.
- 489. Humanistic Psychology**  
Fall, Spring. 4(4-0) Juniors and 3 courses in psychology.  
Subject matter is drawn from the psychology of personality in its various forms. The usual approaches of the behavioral sciences are subject to critical analysis. One goal is to derive some elements of a philosophy of life for humans as potentially rational and ethical beings.
- 490. Special Problems in Psychology**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Combined credits in PSY 490 and PSY 491 may not exceed 12. Juniors, approval of department.  
Each student will work under direction of a staff member on an experimental, theoretical, or applied problem.
- 491. Participation in Psychological Projects**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Combined credits in PSY 490 and PSY 491 may not exceed 12. Juniors, approval of department.  
Each student will participate in a psychological project under direction of a staff member.
- 499H. Senior Project**  
Fall, Winter, Spring. 3(0-6) May reenroll for a maximum of 6 credits. PSY 390H or approval of department.  
Independent research involving literature survey, naturalistic observation, or experimental investigation with staff supervision. Preparation of the Senior paper.

## Descriptions – Psychology

of

### Courses

#### 800. Conditioning and Learning

Fall. 3(3-0)

Detailed stimulus-response analysis of the basic operations of conditioning and learning, including such variables as reinforcement, motivation, and inhibitory effects, with an emphasis on infrahuman data.

#### 801. Perception

Fall of even-numbered years. 3(3-0)  
Majors or approval of department.

Consideration in depth of selected topics in perception. Integration of theoretical and empirical material.

#### 804A. Neuroscience Laboratory I

Winter. 4(2-4) Approval of instructor.  
Interdepartmental with Biophysics and the departments of Physiology, and Zoology.

Development of skills in the methods, techniques and instrumentation necessary for research in a variety of areas concerned with neuroscience.

#### 804B. Neuroscience Laboratory II

Spring. 4(2-4) PSY 804A. Interdepartmental with Biophysics and the departments of Physiology, and Zoology.

Continuation of PSY 804A.

#### 805. History and Systems

Fall of even-numbered years. 3(3-0)  
Psychology majors or approval of department.

Major scientific, cultural, philosophical, and personal influences in the development of psychology. Analysis of persisting issues.

#### 810. Human Learning and Performance

Spring. 3(3-0) Majors or approval of department.

Experimental findings and theoretical analyses of the acquisition, retention, transfer and execution of verbal materials and perceptual-motor skills. Selected demonstrations of major phenomena.

#### 811. Advanced Physiological Psychology

Spring. 4(4-0) Majors or approval of department.

Psychology as a biological science. Consideration of physiological events underlying organism-environment interaction.

#### 814. Psychology of Language

Spring. 3(3-0)

Experimental psycholinguistics, including speech perception, sentence processing, prose comprehension and memory, language production, and language acquisition.

#### 815. Advanced Psychometrics

Fall, Winter. 4(4-0) A course in statistical inference; majors or approval of department.

Theory and practice in analysis and interpretation of psychological data.

#### 816. Advanced Psychometrics

Winter, Spring. 4(4-0) PSY 815.

Continuation of PSY 815.

#### 817. Advanced Psychometrics

Spring. 4(4-0) PSY 816.

Multivariate methods of test analysis: multiple and partial correlation, factor and pattern analysis.

#### 818. Test Construction

Winter. 4(4-0) PSY 817.

Theory, methods, and techniques in the preparation and development of psychological test items and tests.

#### 820. Mathematical Models in Psychology I

Fall. 4(4-0) MTH 111 and STT 201 or approval of department.

Discussion of the relationship between mathematics and psychological theory. Examination of the concepts of structure and change in qualitative psychological systems. Application of algebraic techniques to psychological theory.

#### 821. Mathematical Models in Psychology II

Winter of even-numbered years. 4(4-0)  
PSY 820 or approval of department.

Representative mathematical models in psychology, attending particularly to stochastic models and the relationship between models and data. Advantages of various models for different psychological problems.

#### 828. Clinical Assessment I

Fall. 2(0-4) Majors or approval of department.

Assessment of psychodynamics and psychopathology. Individual case studies based on interviews and psychological tests. Behavioral correlates of psychodynamic problems.

#### 830. Clinical Assessment II

Winter. 2 or 3 credits. PSY 828, approval of department.

Clinical assessment of children. Individual case studies making systematic use of behavior observations, interviews, and standardized tests. Integration of data and principles of development of new assessment procedures.

#### 832. Clinical Assessment III

Spring. 2 or 3 credits. PSY 830, approval of department.

Self-appraisal and investigation of interpersonal transactions in two-person and larger groups. Standardized techniques, individual case studies, and principles of development of new methods.

#### 833. Research Methods in Clinical Psychology

Fall. 4(3-2) Majors or approval of department.

Research strategies and the clinical method: types of evidence, similarities and differences. Questionnaires and scale construction. Introduction to design and data analysis. Social psychological and ethical issues in clinical research.

#### 835. Experimental Psychology: Social Psychology

Fall. 4(2-4) One course in experimental psychology.

Intensive experience in designing, executing, reporting and evaluating research in social psychology, including an individual research project.

#### 837. Psychological Aspects of Politics

Fall, Winter, Spring. 3(3-0) Interdepartmental with and administered by the Department of Political Science.

Relevance of psychological concepts, theories and methods for the study of political institutions, organizations and behavior.

#### 840. Advanced Social Psychology: Cognitive Approaches

Winter. 4(4-0) PSY 815; 20 credits in the social sciences.

Contemporary theory and research in social psychology dealing with attitude organization and cognition, values, attitudes and behavior, attitude change and balance theories.

#### 841. Advanced Social Psychology: Group Processes

Spring. 4(4-0) PSY 815; 20 credits in social sciences.

Contemporary theory and research dealing with the individual in a group context.

#### 845. Developmental Psychology: Infancy

Fall. 4(4-0) Majors or approval of department.

Human infancy: conception to three years. Developmental study of: prenatal life, personality, learning, perception, sensory stimulation and deprivation, neurophysiology, psychophysiology, language and cognition.

#### 846. Developmental Psychology: Childhood

Winter. 4(4-0) Majors or approval of department.

Psychological theories and research methods and findings related to the intellectual, emotional, perceptual, social and personality development of the child.

#### 847. Developmental Psychology: Adolescence and Youth

Spring. 3(3-0) Majors or approval of department.

Psychological theories and research methods and findings related to the intellectual, emotional, perceptual, social and personality development of the adolescent and young adult.

#### 850A. Developmental Psychopathology I

Fall. 3(3-0) Approval of department.

Developmental and systems perspective to childhood and adolescent psychopathology. Epidemiological research, classification systems, mental retardation, learning disabilities, and pervasive developmental, psychotic, and organic disorders.

#### 850B. Developmental Psychopathology II

Winter. 3(3-0) PSY 850A or approval of department.

Externalizing and internalizing disorders of childhood and adolescence including conduct, affective, anxiety-withdrawal, adjustment reaction, personality, eating, psychosexual, and disorders with physical manifestations.

#### 850C. Developmental Psychopathology III

Spring. 3(3-0) PSY 850B or approval of department.

Adolescent and adult psychopathology from a developmental perspective; marital and family pathology as system dysfunctions; conceptual frameworks for these phenomena; description/diagnosis, etiology and intervention with some representative pathologies.

#### 860. Advanced Industrial Psychology

Fall. 4(4-0) Twenty credits in the behavioral sciences or organizational behavior, and a course in statistics.

Industrial and organizational psychology as a science and as a profession.

- 862. Organizational Psychology**  
Winter. 4(4-0) Fifteen graduate credits.  
Survey of current theories of individual behavior in complex organizations. Examples from research in industry, government, and other complex organizations.
- 865. Advanced Neurobiology**  
(BIM 865.) Spring. 4(4-0) BPY 827. Interdepartmental with Biophysics and the departments of Anatomy, Physiology, and Zoology. Administered by the Department of Anatomy.  
Basic organization, structure and function of neural networks comprising sensory, motor, and autonomic systems including examples from invertebrates and vertebrates. Attendance at neuroscience seminar is required.
- 866. Personnel Selection and Evaluation**  
Fall of even-numbered years. 3(3-0) Fifteen graduate credits.  
Critical treatment of research methods and instruments in personnel selection and evaluation as applied to governmental, business and industrial situations.
- 870. Introduction to Ecological Psychology**  
Fall. 4(4-0) PSY 815 concurrently or approval of department.  
What and why of experimental ecological psychology; planning, action, evaluation, dissemination of information. Researchable problems, funding, dynamics of research teams, identifying ecological variables. Class work and community research.
- 871. Advanced Ecological Psychology**  
Winter. 4(4-0) PSY 870.  
Applications of ecological psychology; measurement; hypotheses and research plans; initiating, maintaining, terminating naturalistic psychological research; evaluating and publishing results. Review of selected experiments. Class work plus research in community.
- 872. Experimental Production of Social Change**  
Spring. 4(4-0) PSY 870, PSY 871.  
Use of psychological research to produce social change. Creation of acceptance of social change. Examination of effectiveness of experimental intervention into social systems. Class work plus community research.
- 873. Ecological-Community Psychology Research Methods I**  
Fall. 4(4-0) Approval of department.  
Ecological-community psychology literature with the intent of identifying social problems, methods for their solution, and the philosophical, political, and role-definition issues confronting the ecological-community psychologist. At least eight hours per week in a community setting required.
- 874. Ecological-Community Psychology Research Methods II**  
Winter. 4(4-0) PSY 873, approval of department.  
Planning and design of innovative field research including research planning, experimental design, quasi-experimental design, program evaluation, measurement, data-gathering, validity and reliability, and the dissemination of research results. At least eight hours per week in a community setting required.
- 875. Ecological-Community Psychology Research Methods III**  
Spring. 4(4-0) PSY 874, approval of department.  
Implementation of field research and data analysis; coverage of SPSS commands and programs. At least eight hours per week in a community setting required.
- 880A. Basic Concepts and Issues in Clinical Psychology**  
Fall. 3(3-0) Clinical majors or approval of department.  
Concepts and issues underlying research and professional practice in modern adult clinical psychology. Emphasis is on personality development and clinical interventions, such as psychotherapy, behavior therapy, family therapy, and community approaches.
- 880B. Basic Concepts and Issues in Clinical Psychology**  
Winter. 3(3-0) PSY 880A, approval of department.  
Continuation of PSY 880A.
- 880C. Basic Concepts and Issues in Clinical Psychology**  
Spring. 3(3-0) PSY 880B, approval of department.  
Continuation of PSY 880B.
- 885. Vertebrate Neural Systems I**  
(PSY 885.) Winter of even-numbered years. 5(3-4) ANT 815, ANT 865 recommended. Interdepartmental with the departments of Anatomy, Physiology and Zoology. Administered by the Department of Anatomy.  
Structure and function of major component systems of vertebrate brains, their evolution, ontogeny and comparative analysis in mammals, birds, reptiles, amphibians and fish. Interrelation of behavioral, anatomical and physiological studies.
- 886. Vertebrate Neural Systems II**  
(ZOL 886.) Spring of even-numbered years. 5(3-4) ANT 885. Interdepartmental with the departments of Anatomy, Physiology, and Zoology. Administered by the Department of Anatomy.  
Continuation of PSY 885. Major component systems of vertebrate brains, their evolution, ontogeny, and comparative analysis in mammals, birds, reptiles, amphibians and fish. Interrelation of behavioral, anatomical, and physiological studies.
- 889. Advanced Issues in Humanistic Psychology**  
Winter, Spring. 3(3-0) May reenroll for a maximum of 6 credits. PSY 489 and approval of instructor.  
Identification and critical evaluation of social and philosophical issues tacitly imbedded in psychology, e.g., the specificity of the nature of humans; psychological versus physical reality; freedom; modes of knowledge; ethical values.
- 890. Special Problems**  
Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 36 credits. Approval of department.
- 899. Master's Thesis Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 902. Special Research Techniques**  
Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 12 credits. Graduate students and approval of department.
- 908. Seminar in Organization Theory**  
Winter. 4(4-0) MGT 806; doctoral candidates; master's candidates with approval of department. Interdepartmental with and administered by the Department of Management. Directed reading and research on issues in contemporary organization theory.
- 914. Seminar in Advanced General Psychology**  
Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 24 credits. Thirty graduate credits in psychology or approval of department.  
Critical study of a selected area such as sensation, perception, motivation, emotions, learning, physiological, comparative, thought and language.
- 924. Seminar in Measurement**  
Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 16 credits. Thirty graduate credits with 15 of them in psychology.  
Critical study of a selected area such as factor analysis, pattern analysis, partial and multiple correlational analysis, psychophysical methods, scaling, reliability and validity, and factorial designs.
- 928. Practicum: Psychological Clinic I**  
Fall. 2 to 5 credits. Approval of department.  
Introduction to clinical evaluation and treatment. Supervised experience in psychodiagnosis and psychotherapy of adults and children in the Psychological Clinic. Primary focus on work with families. Didactic seminar in related theory and research.
- 930. Practicum: Psychological Clinic II**  
Winter. 2 to 5 credits. PSY 928.  
Continuation of PSY 928.
- 932. Practicum: Psychological Clinic III**  
Spring. 2 to 5 credits. PSY 930.  
Continuation of PSY 930.
- 934. Seminar in Personality**  
Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 16 credits. Thirty graduate credits with 15 of them in psychology.  
Clinical study of a selected area such as theory, assessments, dynamics, structure, the self and determinants.
- 936. Attitudes and Personality**  
Winter. 3(3-0) Thirty graduate credits.  
Review and analysis of research on sentiments, beliefs and opinions, authoritarianism, pseudoauthoritarianism, and democratic personality; functions, resistance to change and relation to value systems and ideology.
- 944. Seminar in Social Psychology**  
Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 16 credits. Thirty graduate credits or approval of department.  
Critical study of a selected area such as roles, communication and persuasion, individual interaction within small and large groups, behavior in relation to norms and interpersonal distances.

## Descriptions – Psychology

### of Courses

**950A. Child and Family Interventions: Dynamic Child Psychotherapy**  
Fall. 3(3-0) PSY 850C or approval of department.

Dynamic processes underlying therapy with children; methods and techniques; the child's symbolic communications through language, art, and play materials; assessing progress of therapy; review of research.

**950B. Child and Family Interventions: Behavioral/Cognitive Therapies**  
Winter. 3(3-0) PSY 850C or approval of department.

Behavioral/cognitive approaches to interventions with children in family, peer, school, and community contexts; behavioral/cognitive processes, theory, assessment, methods, and research. Underlying behavioral change.

**950C. Child and Family Interventions: Family and Community Systems Approaches**

Spring. 3(3-0) PSY 850C or approval of department.

Family and community systems-based intervention in child, marital, and family problems. Conjoint family therapy, primary prevention and community program interventions.

**954. Seminar in Developmental Psychology**

Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 16 credits in different areas. Thirty graduate credits, 3 of which must be in child psychology.

Critical study of a selected area such as theory, techniques and methods of observation, parental attitudes and practices, intellectual, personal and social development, motivational, emotional, perceptual, and intellectual issues.

**961. Personnel Training and Training Evaluation**

Winter of even-numbered years. 4(4-0) PSY 860 or approval of instructor.

Theory and research in training and development of personnel at all organizational levels. Evaluation of training programs.

**962. Psychology of Motivation and Attitudes at Work**

Spring of odd-numbered years. 4(4-0) PSY 860 or approval of instructor.

Theoretical approaches to the enhancement of work and life satisfaction. Comparison of approaches to worker motivation. Role of satisfaction in motivation models.

**963. Leadership and Managerial Behavior**

Spring of even-numbered years. 4(4-0) PSY 860 or approval of instructor.

Role of the leader in effecting individual, group, and organizational performance.

**964. Organizational Diagnosis and Change**

Winter of odd-numbered years. 4(4-0) PSY 860 or approval of instructor.

Analysis of organizational functioning and the effective introduction, spread, and adoption of change.

**969. Seminar in Industrial Psychology**

Fall, Winter, Spring. 2 to 4 credits. May reenroll for a maximum of 16 credits. Approval of department.

Specialized areas in industrial and organizational psychology.

**970. Seminar in Ecological Psychology**

Fall, Winter, Spring. 4(4-0) May reenroll for a maximum of 12 credits. Approval of department.

Critical study of a contemporary ecological psychology issue such as the psychological aspects of over-crowding, the interpersonal and intrapersonal conflicts created by environmental degradation, and similar current topics.

**973. Rorschach Method**

Winter. 4(4-0) PSY 832.

History and hypotheses of the method. Review of research. Administration and scoring of the test. Introduction to interpretation.

**975. Advanced Practicum: Psychological Clinic**

Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. PSY 932.

Clinical experience in assuming responsibility for total case integration and interpretation of findings to parents and agencies.

**976. Psychopathology: Psychoanalytic Theory, Neuroses and Psychosomatics**

Fall. 3(3-0) PSY 427, PSY 832.

Kraepelinian, Pavlovian, and Freudian traditions in abnormal psychology and psychiatry. Psychoneuroses and psychosomatics with major emphasis in psychoanalytic approaches. Research and problems. Psychogenic and somatogenic positions in psychopathology.

**977. Psychopathology: Psychoses and Developmental Disorders**

Winter. 3(3-0) PSY 976.

Behavioral and development disorders such as psychopathy, delinquency, mental deficiencies; selected functional and organic psychotic syndromes; psychosis as distinguished from psychoneurosis; continuity versus discontinuity of normal to abnormal behavior. Research considerations.

**979. Counseling and Psychotherapy**

Fall. 3(2-2) Approval of department.

Psychotherapy with late adolescents and adults. Various points of view with emphasis on interpersonal relationship and client-centered approaches. Techniques for introducing therapeutic movement. Study of tape recordings and research findings.

**980. Practicum: Individual Counseling and Psychotherapy**

Winter. 3(2-2) PSY 979 and approval of department.

Detailed study of psychotherapeutic interviews aimed at developing skill as a psychotherapist. Therapeutic and assessment techniques, interview dynamics and psychotherapeutic movement studied by means of verbatim transcriptions, tape recordings, films, role playing, and observation.

**981. Practicum: Counseling and Psychotherapy**

Spring. 3(2-2) PSY 980 and approval of department.

Counseling with a variety of clients at the University Counseling Center. Group and individual discussions of problems, processes, counselor-client interaction, and professional ethics.

**982. Advanced Practicum: Counseling and Psychotherapy**

Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 12 credits. PSY 981 and approval of department.

Counseling and psychotherapy with a variety of clients of the University Counseling Center.

**985. Seminar in Clinical Psychology**

Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 16 credits. Forty-five graduate credits in psychology.

Critical study of a selected area such as theories, diagnosis, projective techniques, psychotherapies, hypnosis, psychopathologies.

**999. Doctoral Dissertation Research**

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

## PUBLIC AFFAIRS MANAGEMENT

See Agricultural Economics.

## RADIOLOGY

## RAD

### College of Human Medicine College of Osteopathic Medicine

**480. Nuclear Medicine for Medical Technologists**

Winter. 3(2-2) PHY 237, PHY 257; MTH 109; Junior or Senior Medical Technology majors.

Terminology and fundamentals of radionuclides. Application to nuclear medicine. Radiation measurement, protection, biologic effects with discussion of instruments and imaging systems. Principles of radioimmunoassay. Radiopharmaceutical techniques and clinical interpretation.

**525. Fundamentals of X-ray Interpretation**

Fall, Winter, Spring, Summer. 2(2-0) Admission to College of Human Medicine or College of Osteopathic Medicine. Others: approval of department.

Beginning laboratory course in recognition and interpretation of the normal and abnormal X-ray image. Use of X-ray as alternative diagnostic approach in efficient management of patients.

**550. Decision Analysis in Medicine**

Fall, Spring. 2(2-0) Graduate/Professional students or approval of department.

Terminology and fundamentals of objective decision analysis; application to problems in diagnosis and treatment. Diagnostic test performance, patient management strategies, utility analysis, cost-effectiveness, patient's role in medical decisions.

**590. Special Problems in Radiology**

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.

Special aspects of radiology and the use of X-rays in the efficient management of patients.